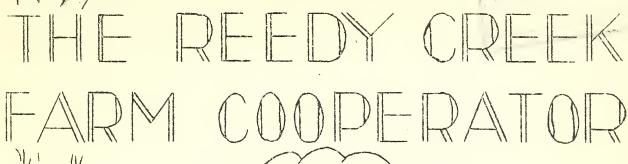
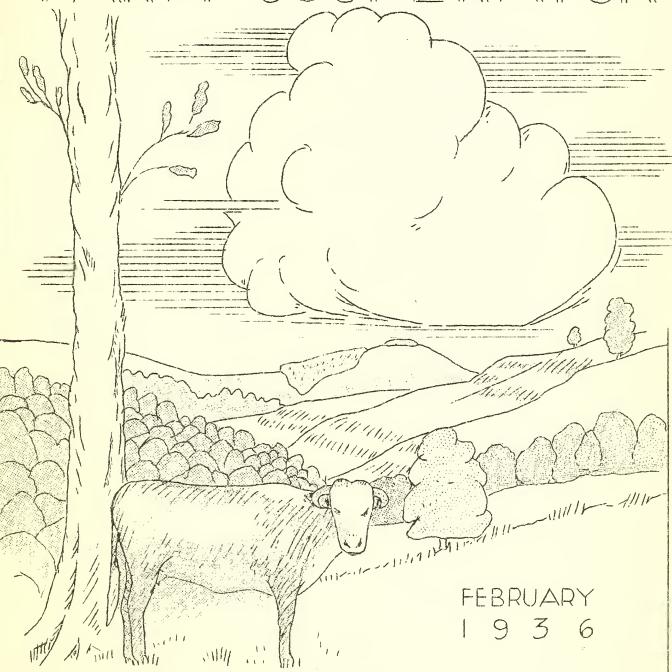
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE-



THE REEDY CREEK FARM COOPERATOR

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FORWARD

The articles and information herein are intended to serve as a guide in saving soil for the future. We feel that the Soil Conservation Service has made tremendous strizes when everything is considered. The many devices, structures and plans being put into practice are the best known today, yet they may be superseded by better methods tomorrow.

Through a limited amount of experimentation and the knowledge already obtained from other existing agencies, we are attempting to seek out the best methods of erosion control for the conditions peculiar to this region. Obviously, conditions are not the
same throughout the state. To put it another way -- different
erosion conditions of the state call for different methods of control. Yet, in the main, the ultimate goal of saving the soil will
be attained through re-vegetation, regardless of the methods used.

Pre-eminent in the work of the Soil Conservation Service is the fact that our work is demonstrational. The Reedy Creek Project is a demonstrational project. Certain farms in this project area are signed up and erosion control practices applied that others may see the results of a splendid attempt to conserve the soil and its elements. This thing cannot be accomplished in a day; neither will it be done in a month or a year. But, with an acceptance of the challenge, a united effort, and a vision of the future, WE GO FORWARD.

SOMETHING TO THINK ABOUT

It has often been said, "there are more ways than one of killing a cat than choking him to death on butter." Just so, there are more ways than one to help make a living on the farm. While unquestionably the Reedy, Spring and Tucker Creeks areas are primarily devoted to livestock raising, many farmers within the district help make their actual living or even increase their cash incomes by producing something else on the farm other than livestock. Those farmers who do not even expect to receive a cash gain, benefit by producing something to be consumed on their own tables. The farmer who systematically keeps a flock of hens, a few hives of bees, produces a good garden, grows some of the small fruits, such as strawberries, raspberries and grapes, or sets out a few of the different kinds of fruit trees, is going a long way in helping to make a living from his farm. These are only a few of the things available to every farmer in the area, and any one of them is capable of producing something for the home table or as a source of eash income if handled properly.

The big factor is the human factor or the farmer himself, and it all depends on him, the amount of his time and effort expended, that decides how much of a success any of these side ventures might be. I will not soon forget the industrious farmer on Tucker Creek who, in order to escape the ravages of the Mexican bean beetle, had gone into the heart of a 50 acre tract of woods and cleared out a three acre patch to plant beans. According to his own statement, beans had been grown there for three years without having been visited by the bean beetle. After carefully looking the patch over during its third year, I was forced to admit no evidence of the Mexican bean beetle could be found.

Then there were several farmers who made good last year in growing strawberries and grapes, and some set out a few fruit trees, while others have stated their intentions of setting out some trees this year. A warning here might benefit those with intentions of buying new trees for planting this spring. In the past, several farmers have been fleeced by purchasing their trees from traveling salesmen, representing unknown nurseries. The best plan is to buy only from known reputable nurseries, or, if you don't know, consult your County Agent or Agricultural Experiment Station.

There is a chance then, to really help by selecting some side line, and doing a good job with it, to go with this business of livestock production. A natural inclination toward this side line will help materially towards its success, but in any event, remember the words of the wise banker, "Before you invest, investigate."

STREAM CONTROL WORK

In general, the farmer in this area places considerable dependence on the crops he can raise on his bottom land. Any effort directed towards protection of this bottom land should, therefore, be of vital importance to his welfare. Many of the streams are cutting to pieces the bottoms through which they flow. A relatively small amount of well planned work directed towards stream control will pay large returns in keeping available for use the better of our tillable land.

It is regrettable that, in almost every stream problem encountered, the first remedy that comes to mind is straightening of the stream channel. More often than not such procedure will only lead to trouble. Whenever a channel is straightened, its total length is shortened. That means a sharper grade with greater water velocity through the new channel. Cutting will occur along the new course and probably heavy silting just below it. Instead of having one channel to contend with there will be two, because ordinarily several years are required to fill the old. It will require constant effort to confine the stream in a new course for its general tendency will be to resume meander. Where straightening of channel appears justifiable several factors must be carefully weighed. Can a fairly uniform grade be established? Is there a large bed of rock near the surface in the proposed channel? Will the cut be excessive? Is there danger of a slip from adjacent slopes in case the stream cuts down? Will the new channel head directly into the field of a neighbor farmer? . Are there other methods to use which will give the desirod results and yet be far more economical? These and various other matters have to be decided upon before any logical plan of control can be formulated.

When it is further considered that dollar for dollar the greatest percentage of return for amount expended is obtained by clearing existing channels; then the long used method of going into a stream and removing fallen trees, snags, sand bars, and clearing the banks of projecting rubbish, should certainly justify consideration over channel straightening. It frequently happens that efficency of channel can be increased from one-third to one-half by proper clearing. This holds true primarily for small streams. The larger the stream the less good can be done by clearing of banks.

Ordinarily the farmer is interested in keeping streams from doing heavy cutting. Bank protection at vital points in the form of brush or rock-riprap, rock er log cribbing, and carefully placed plantings will accomplish this purpose without the necessity of heavy cuts or extensive channel straightening. The main thing is to "keep at it" and check cutting before it has a chance to get the "upper hand."

GCOD

Once willows, snags and similar obstructions have blocked a channel, there is constant danger of new channels being formed by flood water. Willows will keep on growing and spreading until finally they will entirely block the stream. When this stage is reached, the average farmer has not the time to spend in cleaning out all the filth and trash accumulated. A much better plan is to watch the stream in the beginning and prevent this from happening. Most structures such as are applicable to stream bank protection can be built by the farmer. He has the material on the farm and usually will have the time to build the structures during the winter months. The main thing is to get at it.

.The old rule "A stitch in time saves nine" applies very well in stream control work.

After the structures have been placed, great care must be taken to properly seed and plant the areas immediately adjacent to the structures. The theory is that, when the structure finally rots away, the trees, shrubs or grasses planted should take the place of the structure.

* * * * *

CLASSIFICATION OF SPECIES

ACCORDING TO DESIRABILITY IN FARM WOODLOT

TNTERMEDIATE

POOR

G.C.OD	T 14 T CW/MD727 W T 12	1001
Red Cak	Black Oak	Beech
White Oak	Chestnut Oak	Buckeye
Locust	Hickory	Red Maple
Mulberry	Scrub Pine	Black Gum
Ash	Elm	Sourwood
Yellow Poplar	Hemlock	Butternut
Cucumber	Scarlet Oak	Sassafras
Basswood	Pin Oak	Persimmon
White Pine		
Pitch Pine		
Black Walnut		
Sugar Maple		
Post Oak		
Red Cedar		

* * * * *

God must have loved the common people. He made so many of them.

CROP ROTATIONS

The Soil Conservation Service, during the first year of its existence in the Reedy Creek Project area, was able to work out, with cooperating farmers, crop rotations covering 7,586 acres. This is quite an achievement when we take into consideration the value of crop rotations both from the standpoint of increased yields and of erosion control.

THE ROTATION OF CROPS MAKES POSSIBLE:

- 1. Increased yields which, through crop rotations, enables the farmer to either grow a large amount of feed for his livestock, (if this has been his limiting factor), use a larger percentage of his acreage for cash crops, or retire the less productive acres to pasture or woodland. Proper crop rotations can be expected to increase yields very materially over haphazard methods of cropping such as continuous corn, fallow land, lack of cover crops, etc.
- 2. Decreased erosion, through proper crop rotations, is one of the main reasons why the Soil Conservation Service at the Reedy Creek Project has been so careful in its effort to work out the best possible crop rotations from the land conservation standpoint. While doing this, the Service has not lost sight of the fact that one of the farmers chief needs is an increase of winter feed. This has been taken care of through the introduction of Alfalfa and Barley as well as other less important crops. A remendous increase has also been made in the production of Red and Alsike clovers for hay.
- Journal of the two points just mentioned. That is, yields are materially increased and erosion is retarded due to the more luxurious growth of vegetation. Proper crop rotations also aid in building up the organic matter in the soil.
- 4. A balanced crop production makes it possible for the farmer to provide a more balanced ration for his livestock and, at the same time, give proper care to his soil.
- 5. The allowance for strip cropping can be made through crop rotations, thus allowing a sloping field to be used partially for cultivated crops and partially for hay crops and other close growing crops. This retards crosion and on a number of farms provides for a proper balance in crop production.
- 6. A method of controlling weeds can partially be accomplished through crop rotations. Close growing crops tend to discourage some weeds while clean cultivation tend to discourage others.
 - (This article will be continued in the next issue.)

During the past two weeks, we have been hearing from all sides the cry "Save our birds! Feed our wildlife!" The cry is well founded, as present low temperatures and abundance of snow have resulted in an acute emergency so far as bird life is concerned. There are numerous reports of dead quail and other birds being found, death being due to a combination of starvation and freezing.

Biologists have determined that, if all birds were to perish today, life on the earth could exist for not more than ten years, due to the fact that insects would multiply so rapidly that they would over-run and consume all other forms of life. While, during the winter months, most birds are satisfied with food consisting of seeds, berries, grain, etc., it is a recognized fact that as soon as warm weather arrives, their diet immediately turns almost entirely to insects. It is, therefore, evident that an effective erosion control demonstration must include protection and encouragement of birds, which will, in turn, protect the vegetation necessary to control erosion.

Recognizing this fact, the Soil Conservation Service has considered the present emergency as an opportune time to embark on its wildlife conservation program. On January 27th three feeding shelters were established on farms whose owners have signified their willingness to keep the shelters stocked with grain, after the shelters have been erected by the Soil Conservation Service. Additional shelters have been erected since that date, and present plans provide for numerous others.

In order that these feeding shelters may be of the greatest benefit, it is necessary that each cooperator:

- 1. Notify the Soil Conservation Service of the location of grouse or coveys of quail.
- 2. Permit the erection of the shelters from materials found on the farm (Required materials are posts, poles, pine branches, hay, straw, fodder, etc.) The Soil Conservation Service will furnish an automatic feeder)
- 3. Agree to inspect the shelter at frequent intervals, maintain it, and keep it stocked with an adequate supply of grain.

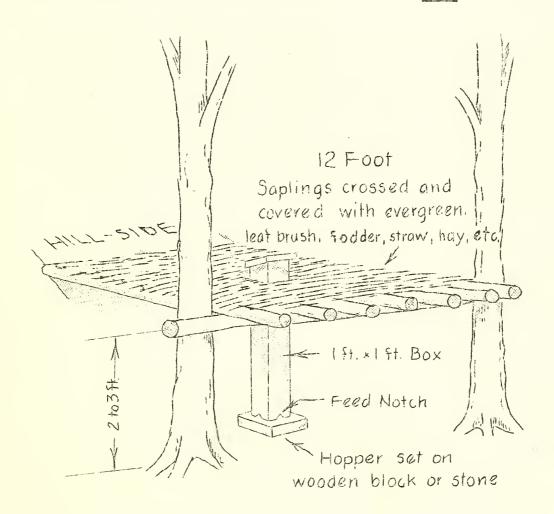
It is, of course, impossible for the Soil Conservation Service to crect feeding shelters on every farm. The time element alone prevents us from doing so. Unfortunately we will be able to erect only a small percentage of the total number of shelters required during the present emergency. However, anyone interested in erecting a shelter

himself may secure full information and details by applying to the Soil Conservation Service. The Soil Conservation Service would like to see each cooperator have at least one permanent feeding shelter on his farm.

The best feeding mixture consists of 40% wheat, the remainder being made up of oats, rye, barley, cracked corn, etc. However, any combination of small grains may be used. Realizing that there are numerous cooperators who will not be able to furnish any small grains, we suggest the use of barn floor sweepings and manger leavings containing lespedeza and other hay seeds. This mixture, however, will not feed thru automatic feeder, and it is recommended that it be used at frequent intervals at protected places.

The Scil Conservation Service will also cooperate in the crection of squirrel feeding stations, if the cooperator so desires.

LET'S PULL TOGETHER AND FEED OUR WILDLIFE NOW!



SKETCH OF BIRD SHELTER

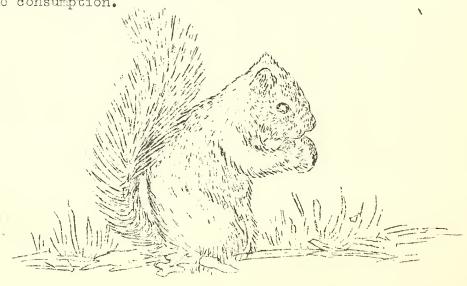
CUTTING THE FARM WOODS FOR PROFIT

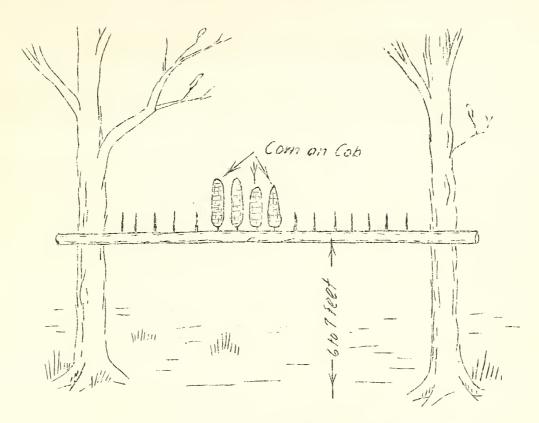
Careful and wise cutting of the farm woodlot, both for home use and market, often makes the difference between profit and loss in the final calculation of the yearly income from the farm. However, in order to continue woodland on a profitable basis, certain basic principles of good forest management must be followed.

Diseased, crooked and otherwise defective trees make just as good fuel wood as straight sound trees which have a far greater value for lumber, pulp and better grade farm timbers. The removal of these defective trees for fuel, besides furnishing the desired product and saving the better quality trees, gives more space, light and plant food to the remaining stand, thereby increasing the growth and value of the woods. If the stand contains a number of large, over-mature trees, they too may well be removed in order to accelerate growth of the young trees and induce reproduction on which the crop of the future depends. These large trees should be made into saw-logs at such time as market conditions warrant a sale.

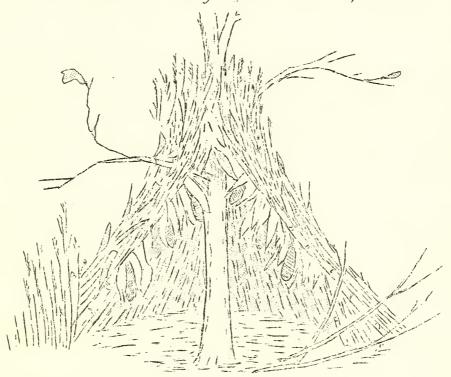
The selection of trees for cutting by species is equally important as the selection by form. Beech, Seft Maple and Sassafras may well be used for fuel, saving the better species such as White Oak, Red Oak and Yellow Poplar for lumber at such time as it may be needed on the farm or prices warrant a cutting for sale. When cutting for lumber, it must be remembered that, as a tree increases in size, it increases in value. A ten inch tree that will saw 25 board feet will saw in the vicinity of 300 board feet if allowed to grow to 20 inches. On the strength of these figures is it not wise to leave your small diameter trees until such time as they may be cut profitably?

Cutting by the above system, which is known as the selective method, insures a continuous soil cover, thus building the soil and preventing erosion. This keeps a new crop always in the process of growing, and supplements the farm income each year, either directly by cash sales or indirectly by furnishing products for home consumption.





SPIKE POLE FEEDER
This feeder is very good for squirrels.



SHOCKS OF CORN NOT ONLY PROTECT FOOD BUT CAN BE MADE INTO A PRACTICAL SHELTER UNDER WHICH TO PLACE OTHER FEED

ESTABLISHING A STAND OF BLACK WALNUT TREES

A high price for walnut lumber and a good sale for walnut kernels have recently aroused considerable interest in the establishment of stands of walnut on the farm.

Walnut trees may be produced either by planting the seed directly in the field or by planting seedlings which are either purchased from a nursery or produced at home. Each method has certain advantages. Planting the seed is the cheapest, simplest and quickest method, while planting seedlings is the surest method when the owner desires a complete stand with no vacancies. There is, at present, no information relative to which method produces the best trees at maturity.

Regardless of which method is employed it is usually desirable to protect the young trees from grazing and trampling until their tops are out of reach of livestock. This takes from two to three years if growth is thrifty.

Black walnut seedlings for field planting can be easily grown at home. The nuts should be planted two to three inches apart in shallow furrows and covered with two to three inches of soil. The rows should be wide enough apart to allow for good cultivation. They may be planted either in the fall or early spring, although fall is preferable as it eliminates the otherwise necessary work of stratification.

When the seedlings first come up they are tender and easily broken. Poultry and farm animals will destroy them if allowed to trample over the seed beds. When the seedlings are about four inches high cultivation should begin. This cultivation should be done much the same as with garden crops, using care not to bruise and break the tender plants or fibrous roots. Further cultivation should be made as often as is needed to control weeds and moisture.

The young trees may be lifted and planted in the field either in spring or fall, although spring is preferable since it eliminates the danger of frost heaving. After the trees are lifted care must be exercised that the roots do not dry out or freeze, either or which will result in a low percent of survival and a poor stand.

Further information on growing Black walnuts may be obtained from the Reedy Murseryman, Staff Forester, the State Forester, or the State Extension Forester.

NOTICE

All Cooperators and friends of the Soil Conservation Service are invited to attend a Seminar Meeting Friday Ovening, February 14th, at 7:30 P. M. in the office of the Soil Conservation Service.

Dr. C. F. McClintic, Warden of the State Penitentiary, will be the principal speaker on the program, which will be entirely devoted to Wildlife in West Virginia.

U. S. DEPARTMENT OF AGRICULTURE Soil Conservation Service

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